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The Farm Plan

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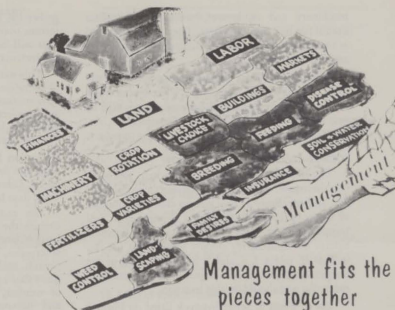
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The Farm Plan



This planning guide is designed to help you select the most efficient and profitable crop and livestock combinations to fit your labor, capital, and management resources together. You can compare different scales of operations and combine various enterprises to see which looks best for your situation, before money is invested.

As you make a budget, it will be necessary to make many assumptions about level of management, probable yields, and prices for the foreseeable future. Base your estimates on average conditions.

The planning guide is divided into two parts.

Part I contains the instructions and planning forms on which to work out enterprise combinations and profit opportunities. There are three types of planning forms: (1) Land use and cropping systems, (2) Livestock organization, and (3) The farm summary.

Part II is the reference material and supplemental planning information you will use, where you don't have your own figures as you work the planning forms in Part I. An acceptable level of management has been assumed in the enterprise budget.

FORM 1—LAND USE AND CROPPING SYSTEMS

Use Form 1 to prepare the crop plan. You divide your acreage among various crop enterprises, such as

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small grain, row crops, forage crops, and pasture. Space is provided to show crop yields, prices, and labor requirements.

Factors for converting all feed grains and roughages to feeding equivalents are included on the form. You can look up price information, labor requirements, and the cash cost of producing various crops in the tables in Part II. Short-cuts are employed to determine income over costs to help you plan and decide between alternative operations.

Corn and Hay Equivalents. If you convert all feed into corn or hay equivalents, you will know the relative value of each feed in terms of bushels of corn or tons of alfalfa hay on a dry basis. This way you can compare the feeding value of various crops and select those that will fit your program best.

Labor Requirements. Labor needs per crop acre are expressed in terms of the amount of work one man may accomplish in a 10-hour day. Refer to the crop reference sheet of Part II for the work days needed for each crop.

Cost of Production. Only cash costs (variable costs) of growing and harvesting each crop are considered in Form 1. These costs include fuel, oil and grease, repairs, seed, and twine. *Add your own cost of fertilizer and weed-control spray to this figure.* Refer to Part II, crop reference sheet, for growing and harvesting costs.

Fixed costs such as land charges, depreciation on

machinery and equipment, taxes, and insurance should not be considered here. They will be handled as undistributed costs and calculated in the summary analysis in Form 3.

Alternatives. Work out more than one land use and cropping system if necessary. Place a plan number on the form in the space provided so it will be easy to refer to. Use the form as you complete the livestock organization form and the one for the summary.

FORM 2—LIVESTOCK ORGANIZATION

The livestock form is designed to help you work out alternative combinations of livestock to compare and analyze. Space is provided to show the number of units; feed, labor, and capital requirements; and income over cost. Use this form with the livestock enterprise requirements already worked out for you in Part II, tables 3, 4, and 5. Standards used in the budgets are based on an acceptable level of management that you should be able to attain.

Use of Form 2. Select livestock listed on Form 2 that you wish to consider in your livestock plan and identify it by the corresponding number in the left margin. For example, with "common steers" (number 10), you would refer to table 5 of the Part II livestock summary sheet, enter the requirements in Form 2, and complete the budget.

If you desire a more careful study of the requirements for a given enterprise or if adjustments need to be made in the physical requirements or prices, you may do so by referring to the detailed enterprise budgets in table 4. Make the changes necessary to fit your operation and then complete the livestock Form 2. Enter totals on line 17.

Feed Available—Surplus or Deficit. Raised feed available is obtained from Form 1, land use and cropping system columns 8 and 10, line 20. Transfer the corn and hay equivalents to the livestock Form 2 in the spaces provided on line 18.

The difference between total feed required, line 18, and raised feed available in corn and hay equivalents represents the amount of feed in excess (surplus) over needs, or the extra feed needed (deficit) to satisfy the requirements for the livestock program.

Work out as many livestock combinations as you like. Number each plan in the space provided at the top of the form. Use this form along with Form 1 to complete the summary Form 3.

FORM 3—FARM SUMMARY

The farm summary, Form 3, tests how profitable your choice of enterprises is likely to be. It brings to-

gether the labor and capital requirements and the income over costs from the crop and livestock forms. You will be able to determine how efficiently the productive resources have been combined in the plan.

This summary reflects the efficiency for one scale of operation. However, by trying different enterprise combinations and scale of operations, you will be able to select the enterprises that make the best use of your land, labor, capital, and management.

The summary form is divided into four sections.

Section 1—Farm Labor. Labor requirements for crop and livestock are summarized from Forms 1 and 2. Labor requirements are expressed in 10-hour work days by enterprise.

Use caution in estimating labor needs. Even though the amount of labor available on a yearly basis balances with the total requirements for the enterprises, it may not satisfy needs. Seasonal rush periods, such as planting and harvesting, usually require that a job be done as rapidly as possible because of weather, soil, and growing conditions. Planting and harvesting often require several individuals working simultaneously to complete the job smoothly and efficiently. Space is provided for including extra rush season labor. Express labor needs in work days.

Section 2—Farm Capital. All real estate and personal property capital requirements are summarized in this section. Real estate capital includes the value of land, buildings, and improvements of a permanent or semipermanent nature. Working capital represents the investment in livestock, livestock equipment, and crop machinery plus one-half the value invested in semi permanent nature. Working capital represents the total value of all assets owned by the operator. Operator's net worth is his equity in the farm assets.

Section 3—Farm Cash Income. Farm cash income is the amount of cash available after all out-of-pocket costs are paid, such as cash production expenses; repairs on machinery, buildings, and equipment; interest; rent; hired labor; taxes; and insurance. No charge is made for depreciation, interest on investment, or returns to family labor and management.

Farm cash income represents cash available to cover cost of depreciation—a charge for capital invested in unpaid family labor, management, and cash available for expansion and family living.

Section 4—Accrued Income. Accrued income is the amount of money remaining for the family labor and management return after all other charges have been taken out. Interest on capital owned plus any amount left over from net family income may be used for expansion without exploiting existing farm operations.

FORM 1. LAND USE AND CROPPING SYSTEM

Acres owned _____
 Acres rented _____
 Total _____

Plan No. _____

Crop	Acres (1)	Yield per A. (2)	Total produc- tion (1x2) (3)	Tenant share (4)	Price per unit (5)	Total Val. of (3 or 4x5) (6)	Equivalents				Workdays* (1x11=12)	
							Corn (3 or 4x7=8)		Hay (3 or 4x9=10)		Factor (11)	Total (12)
							Factor (7)	Total (8)	Factor (9)	Total (10)		
1. Grains: Corn _____							1.0		x x x	x x x		
2. Oats _____							.5		x x x	x x x		
3. Barley _____							.8		x x x	x x x		
4. Rye _____							1.0		x x x	x x x		
5. Wheat _____							1.0		x x x	x x x		
6. Sorghum _____							1.0		x x x	x x x		
7. Soybeans _____							x x x	x x x	x x x	x x x		
8. Flax _____							x x x	x x x	x x x	x x x		
9. _____												
10. Silage: _____							x x x	x x x	.3			
11. _____							x x x	x x x				
12. Legumes _____							x x x	x x x	1.0			
13. Other† _____							x x x	x x x				
14. Rotation pasture _____							x x x	x x x				
15. _____							x x x	x x x				
16. Total cropland _____		x x x	x x x	x x x	x x x		x x x		x x x		x x x	
17. Wild hay _____							x x x	x x x				
18. Permanent pasture† _____							x x x	x x x				
19. Farmstead, etc. _____		x x x	x x x	x x x	x x x		x x x	x x x	x x x	x x x	x x x	x x x
20. Totals _____		x x x			x x x		x x x		x x x		x x x	

21. Crop costs: crop acres x cost/acre‡	(See Part II reference sheet on crop costs)
22. Cost of fertilizer spray material§	(Use your own figures)
23. Total crop costs (lines 21 plus 22)	
24. Total crop income over costs (line 20 minus 23)	

*Workday—Amount of work one man can do in a 10-hour day with average efficiency.

†See Part II reference sheet on pasture carrying capacity.

‡Only direct cash costs of growing and harvesting crops such as fuel, repairs, oil and grease, machine rental, seed, and miscellaneous costs are considered here. Machinery investment, depreciation, interest, and labor costs are considered on Form 3, farm summary.

§If fertilizer and spray material is applied with rented equipment, include the total cost of renting and fuel plus the material. However, if the fertilizer is applied with your own equipment, figure only the cost of material plus fuel oil and repairs on line 22.

FORM 2. LIVESTOCK ORGANIZATION

Livestock enterprise	Livestock requirements and income										
	Corn equivalent		Hay equivalent		Work days		Capital		Income		
	No. of units	Bu./unit	Total	Tons/unit	Total	Per unit	Total	Dollars per unit	Total	Dollars per unit	
	(1)	(2)	(1x2) (3)	(4)	(1x4) (5)	(6)	(1x6) (7)	(8)	(1x8) (9)	(10)	Total (1x10) (11)
1. Dairy cow Grade AC, lbs., milk											
2. Dairy cow Lbs., B.F.											
3. Beef cow Stocker calf sold											
4. Beef cow Calf fed out											
5. Beef cow ranch Stocker calf sold											
6. Steer calves Wintering and grazing (full season)											
7. Calves drylot Full fed											
8. Heifers Fattening											
9. Yearling Deferred and fed Drylot											
10. Common steer											
11. Sow and litter(s)											
12. Ewes and lambs											
13. Feeder lambs											
14. Hens 100											
15. Turkeys											
16. Other											
17. Total requirements				x x x		x x x		x x x		x x x	
18. Raised feed available				x x x							(See Form 1, line 20, col(s) 8 and 10)
19. Feed surplus or deficit				x x x							(Difference between lines 17 and 18)

FORM 3. THE FARM SUMMARY

Section 1—Farm Labor

1. Work days on crops, line 20, col. 12, Form 1.....
2. Work days on livestock, line 17, col. 7, Form 2.....
3. Extra rush season labor needed (No. of work days).....
4. Total work days (lines 1, 2, and 3).....
5. Months/ of labor required (line 4 divided by 25).....
6. Months of operator labor available.....
7. Months of family labor available.....
8. Total (lines 6 and 7).....
9. Months of labor to hire (line 5 less 8).....

Section 2—Farm Capital

10. Current value of bare land owned \$.....
11. Current value of buildings and improvements owned.....
12. Total land and improvements owned (lines 10 and 11)..... \$
13. Current value of livestock equipment.....
14. Capital requirements for livestock, Form 2, line 17, col. 9.....
15. Current value of crop machinery and equipment.....
16. Average inventory of crops, seeds, fertilizer, and other supplies.....
17. Farm operating cash.....
18. Total working capital required (lines 13 through 17)..... \$
19. Total farm capital (lines 12 and 18)..... \$
20. Farm borrowed money.....
21. Operator's net worth (line 19 less line 20)..... \$

Section 3—Farm Cash Income

22. Crop cash income over operating cost, Form 1, line 24...\$.....
23. Livestock cash income over operating cost, Form 2, line 17, col. 11.....
24. Total income over operating cost (lines 22 and 23)..... \$
25. Repairs on buildings and improvements owned (4% of line 11).....
- 25a. Repair on livestock equipment owned (5% of line 13).....
26. Farm overhead (taxes, insurance, etc.) owned (3% of line 19).....
27. Hired labor (line 9) number of mo. x \$ mo.
28. Total of lines 25 through 27. \$.....
29. Line 24 less 28..... \$
30. Interest paid on farm borrowed money.....
31. Cash farm rent paid.....
32. Farm cash income available (line 29 less 30, 31)..... \$

Section 4—Accrued Income

33. Depreciation on buildings and improvements owned (5% of line 11)..... \$
34. Depreciation on crop machinery and equipment owned (10% of line 15).....
35. Depreciation on livestock and equipment owned (12% of line 13).....
36. Interest on land, buildings, and improvements (5½% of line 12).....
37. Interest on working capital (7% of line 18).....
38. Total depreciation and interest (lines 33 through 37)..... \$
39. Net family income — labor and management (line 29, 31 less 38)..... \$

